

REMARKS

This paper is submitted after the final Office Action mailed January 28, 2009 in the above-identified patent application and is accompanied by a Request for Continued Examination.

In the outstanding final Office Action, (a) claims 1-4 and 6-13 were rejected under 35 U.S.C. §103(a) as obvious over Correggi et al. (U.S. Patent Publication 2003/0168314, hereinafter "Correggi"); and (b) claims 5 and 14-20 were rejected under 35 U.S.C. §103(a) as obvious over Correggi in view of one or more of Corniani (U.S. Patent No. 6,308,817), Harris (U.S. Patent No. 4,651,879), and Doudement (U.S. Patent No. 6,591,967).

By way of the foregoing, claims 1, 7, 8 and 10-20 are currently amended, and claims 6 and 9 are cancelled. Consequently, claims 1-5, 7-8, and 10-20 are pending. Support for the amendment to claim 1 can be found at paras [0018], [0024], and [0030] of the substitute specification, for example. Support for the amendments to claims 7, 8, 11-20 can be found at paras [0003] and [0018] of the substitute specification, for example.

In keeping with the foregoing amendments and the following arguments, reconsideration and allowance of the remaining pending claims is respectfully requested.

Claims 1-5, 7-8, and 10-12

Claim 1 has been amended to recite, in part, a transposing device for forming layers of plastic bottles that are fed in rows, a pallet loader for transferring the layers, a conveyor zone situated between the transposing device and the pallet loader wherein the conveyor zone is a sliding table for a layer and the table is movable between a normal parking station of the transposing device and a normal receiving station of the pallet loader, and a buffer for intermediate storage of at least one layer, wherein the transposing device loads layers of plastic bottles to the conveyor zone or to the buffer and wherein the pallet loader picks up the layers of plastic bottles from either the conveyor zone or the buffer.

Correggi teaches a palletizer that includes a loader carriage 10 (asserted by the Office to correspond to the conveyor zone) having a plurality of horizontal, parallel corridors 11 that are each arranged to receive articles 9 (such as plastic bottles). *See* Correggi, para [0029] and Fig. 1 and final Office Action, page 2, lines 21-22. A number of stationary feed channels 4

supply the articles 9 in a direction parallel to the corridors 11. *See* Correggi, para [0031] and Fig. 1. Because the number of feed channels 4 is less than the number of corridors 11, the loader carriage 10 translates in a direction normal to the feed channels 4 to allow each of the corridors 11 to be filled by the articles 9. *See* Correggi, paras [0030], [0031], and [0065]. When all of the corridors 11 are full, the loader carriage 10 stops moving and a pair of side walls 31 (asserted by the Office to correspond to the transposing device) extending parallel to the corridors 11 of the loader carriage 10 transversely converge to lock each row of articles 9 in position within each corridor 11. *See* Correggi, paras [0037], [0040], and [0065] and Fig. 5; and final Office Action, page 2, line 19. A movable transfer head 50 (part of the transfer means 5 asserted by the Office to be the pallet loader) descends from above the stationary loader carriage 10 and gripping means 52 grasps the articles 9 within the corridors 11 of the loader carriage 10. *See* Correggi, paras [0033], [0044], and [0066]; and final Office Action, page 2, line 20. The transfer head 50 then vertically removes the articles 9 from the loader carriage 10 and transfers the articles 9 to the receiver station 2. *See* Correggi, paras [0040], [0066], and [0068]. As the articles 9 are moved by the transfer head 50 to the receiver station, the loader carriage 10 resumes moving relative to the feed channels 4 to repopulate the corridors 11 for the next approach of the transfer head 50. *See* Correggi, para [0068].

Correggi does not disclose or suggest a conveyor zone (asserted to correspond to the loader carriage 10) situated between the transposing device (asserted to correspond to the side walls 31) and the pallet loader (asserted to correspond to the movable transfer head 50 of transfer means 5) wherein the conveyor zone is a sliding table for a layer, as recited in amended claim 1. As described above, the side walls 31 are secured to the loader carriage 10, and therefore the loader carriage 10 cannot be located “between” a plurality of constituent components of the loader carriage 10 and the transfer head 50. *See* Correggi, paras [0035] and [0037] and Fig. 5.

Additionally, Correggi does not disclose or suggest a conveyor zone wherein the conveyor zone is a sliding table for a layer and the table is movable between a normal parking station of the transposing device and a normal receiving station of the pallet loader, as recited in amended claim 1. As explained above, the side walls 31 (asserted to correspond to the transposing device) are a subcomponent of the loader carriage 10 (asserted to be the

conveyor zone), and the loader carriage 10 is not movable relative to a subcomponent that is attached (and moves with) the loader carriage 10. *See* Correggi, paras [0035] and [0037] and Fig. 5.

However, even if the loading carriage 10 was situated between a transposing device and the movable transfer head 50, the loading carriage 10 is not movable between a normal parking station of the transposing device and a normal receiving station of the transfer head 50. As explained above, Correggi teaches that the loading carriage 10 moves relative to the stationary feed channels 4 during the entire loading process to fill the loading carriage 10 with articles 9, and there is therefore no “normal parking station.” *See* Correggi, para [0065].

Additionally, Correggi does not disclose or suggest a buffer for intermediate storage of at least one layer, wherein the transposing device loads layers of plastic bottles to the conveyor zone or to the buffer and wherein the pallet loader picks up the layers of plastic bottles from either the conveyor zone or the buffer, as recited in amended claim 1.

As previously explained, the feed channels 4 of Correggi only supply articles 9 to the loader carriage 10, and the transfer head 50 removes the articles 9 from the loader carriage 10 to transfer the articles 9 to the receiver station 2. *See* Correggi, paras [0065]-[0068]. Consequently, no “buffer” for intermediate storage wherein the transfer head 50 picks up the layers of articles 9 from either the loader carriage 10 or the buffer is disclosed or suggested.

Moreover, modifying the palletizer of Correggi to include a buffer for intermediate storage of at least one layer of articles 9 and wherein the transfer head 50 picks up the layers of articles 9 from either the loader carriage 10 or the buffer would change the principle of operation of the palletizer of Correggi. Specifically, as explained above, the palletizer of Correggi is designed to allow the stationary feed channels 4 to populate each of the corridors 11 of the moving loader carriage 10 while the transfer head 50 transfers the previous load of articles 9 to the receiver station 2. *See* Correggi, paras [0065]-[0068]. However, to include a buffer for intermediate storage would require that the delivery system taught by Correggi would need to be substantially redesigned to allow the stationary feed channels 4 to also fill a buffer zone independent of the moving loader carriage 10. Moreover, the transfer head 50 would need to be significantly redesigned to access either the loader carriage 10 or the buffer zone.

In the final Office Action, the Office asserts that while Correggi does not disclose a “buffer,” the “intermediate receiver station 2 could be used as a buffer [defined by the Office as “any intermediate or intervening shield or device reducing the danger of interaction between two machines ...”] as otherwise pallet robot 5 would collide with transposing device or a conveyor during transfer.” *See* final Office Action, page 3, lines 4-13.

The Applicants respectfully disagree. Even if the Office’s definition of buffer is used, the intermediate receiver station 2 could not be used as a shield to prevent the pallet robot 5 (including the transfer head 50, asserted to be the pallet loader) from colliding with the side walls 31 (asserted to be the transposing device) of the loading carriage 10 and the loading carriage 10 (asserted to be the conveyor). As previously explained, the transfer head 50 of the transfer means 5 is positioned above the loading carriage 10 (having the side walls 31), descends into the loading carriage 10 to grasp the articles 9, and transfers the articles 9 to the remotely-located receiver station 2. *See* Correggi, paras [0065]-[0068] and Fig. 1. The remotely located receiver station 2 is merely the final destination of the articles 9 for palletizing, and as such, cannot prevent the transfer head 50 from colliding with the loading carriage 10. *See* Correggi, paras [0033] and [0065]-[0068] and Fig. 1. Accordingly, amended claim 1 is allowable.

Because claims 2-5, 7-8, and 10-12 either directly or indirectly depend from allowable claim 1, these claims are also allowable.

Claims 13-20

Amended claim 13 recites, in part, a transposing device for forming layers of plastic bottles supplied in rows, a pallet loader transferring the layers of plastic bottles to pallets, a conveyor zone arranged between the transposing device and the pallet loader for the layers of plastic bottles formed by the transposing device, and a distributor which is provided upstream from the transposing device continuously forms several outgoing rows of plastic bottles from an incoming row of plastic bottles.

By contrast, Correggi does not disclose or suggest a conveyor zone arranged between the transposing device and the pallet loader for the layers of plastic bottles formed by the transposing device. As explained in the discussion of claim 1, the Office asserts that the transposing device corresponds to the displaceable side walls 31 that lock the articles 9 within

the loading carriage 10, the loading carriage 10 corresponds to the loading zone, and the pallet loader corresponds to the transfer means 5 (comprising the transfer head 50).

However, the loading carriage 10 cannot be arranged between the transfer head 50 and the side walls 31 of the loading carriage 10 because the side walls 31 are subcomponents of the loading carriage 10. *See* Correggi, paras [0035] and [0037] and Fig. 5.

Additionally, Correggi does not disclose or suggest a distributor which is provided upstream from the transposing device continuously forms several outgoing rows of plastic bottles from an incoming row of plastic bottles. As defined in the specification, a distributor “permits reliable loading of the transposing device with multiple rows of objects, formed from an outgoing single row emerging at a high speed from a manufacturing machine.” *See* substitute specification, para [0008]. While Correggi teaches that multiple rows of articles 9 (within the feed channels 4) are formed, Correggi is silent as to a distributor forming such multiple rows of objects from a single row of articles 9 emerging at high speed from a manufacturing machine. *See* Correggi, Fig. 1. Accordingly, claim 13 is allowable.

Because claims 14-20 either directly or indirectly depend from allowable claim 13, these claims are also allowable.

Application No. 10/575,918
Amendment dated July 28, 2009
Final Office Action of January 28, 2009

Docket No.: 31576/41843

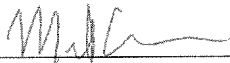
Conclusion

In view of the foregoing, the above-identified application is in condition for allowance. In the event there is any remaining issues that the Examiner believes can be resolved by telephone, the Examiner is respectfully invited to contact the undersigned attorney at (312) 474-6300.

Applicants submit this Amendment accompanied by a three-month extension of time. The appropriate extension fee has been paid by credit card. In the event any additional fees are required, kindly charge the cost thereof to our Deposit Account No. 13-2855.

Dated: July 28, 2009

Respectfully submitted,

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